Inventor: Urano et al.

New Appl. filed September 9, 2003

IN THE SPECIFICATION

Please insert the following paragraph on page 1, at line 4 as follows:

This application is a continuation of the application serial No. 09/753,763 filed

January 2, 2001, now Patent No. 6,471, 125, which is a continuation of serial No. 09/273,276

filed March 22, 1999, now Patent No. 6,181,081.

Please insert on page 7 line 15, the following paragraph as follows:

The apparatus of the present invention can further include a substrate and an invisible symbol on the substrate. The invisible symbol is formed by a compound which includes a cyano group and has an infrared absorption wavelength apart from that of the substrate when heated.

Please replace the entire Abstract of the Disclosure, on page 62 as follows:

An invisible symbol reading apparatus includes a heating unit for heating an invisible symbol formed on a sample and containing a material which emits infrared light when heated, a detecting unit for detecting infrared light emitted from the invisible symbol, and an arithmetic operation unit for binarizing a detection signal from the detecting unit. The arithmetic operation unit calculates a differential coefficient of the detection signal, that corresponds to a position on the sample. On the basis of upper and lower threshold values set for the differential coefficient, the arithmetic operation unit determines a maximum value of the differential coefficient in a region exceeding the upper threshold value and a minimum value of the differential coefficient in a region smaller than the lower threshold value. The arithmetic operation unit binarizes the detection signal by using the maximum or minimum value as a leading or trailing edge of a binary function.

An article including a substrate and an invisible symbol on the substrate is disclosed.

The invisible symbol is formed by a compound which includes a cyano group and has an infrared absorption wavelength apart from that of the substrate when heated.